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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Andrew Perkins

Serial No. 10/766,754

Filed: January 27, 2004

For: METHOD AND APPARATUS FOR
PRE-TEARING STRINGS OF
AIR-FILLED PACKING MATERIAL
AND THE LIKE

Examiner: Thanh K. Truong
Group Art Unit: 3721

Confirmation No. 2266

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BRIEF ON APPEAL

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REAL PARTY IN INTEREST

The real party in interest is Free-Flow Packaging International, Inc., a Delaware corporation with its principal place of business in Redwood City, California, to whom the application has been assigned.

RELATED APPEALS AND INTERFERENCES

None.

STATUS OF CLAIMS

The application originally filed with Claims 1 - 20. Claims 21 - 23 were added by an amendment filed July 22, 2005, and Claims 10 and 11 were amended to depend from Claim 21 in that same amendment. In an amendment filed December 29, 2005 and corrected January 18, 2006, Claims 1 - 3, 6 - 11, and 14 - 15 were amended, and Claims 21 - 23 were cancelled. Claims 1 - 20 are on appeal.

Currently, no claims stand allowed.

STATUS OF AMENDMENTS

No amendments have been filed since the action from which the appeal is taken..

SUMMARY OF CLAIMED SUBJECT MATTER

The claims on appeal are directed to a method and apparatus for making strings of air-filled packing cushions 13 (Fig. 1) which are partially pre-torn 71 (Fig. 1) along rows of perforations 27 (Fig. 1) to facilitate tearing the strings into lengths with desired numbers of cushions.

As defined by Claim 1 and described at Page 3, line 7 to Page 6, line 10 and Page 7, lines 15 - 24, the apparatus comprises means (rollers 33, 34 in Fig. 2) for feeding superposed layers of film material having longitudinally spaced, transversely extending rows of perforations 27 (Fig. 1) along a path, means (inflation tube 44 in Figs. 2 and 5) for injecting air between the two layers of film material, means (sealing assembly 46 in Fig. 2) for sealing the layers of film material together to form air-filled cushions (Fig. 1) between the rows of perforations, and means (feed rollers 53, 54 and tear rollers 56, 57 in Figs. 3 and 5) engagable with the string of air-filled cushions for partially tearing the material along the rows of perforations to facilitate tearing a desired number of the air-filled cushions from the string.

Claims 2 - 5 depend from Claim 1, and Claim 2 defines the means for partially tearing the material as comprising a tear roller 56 (Fig. 3, 5) having an arcuate section 67 (Fig. 3) which periodically engages an edge portion of the material and a section 66 (Fig. 3) adjacent to the arcuate section which remains out of driving engagement the material.

Claim 3 depends from Claim 2 and further defines the means for partially tearing the material also includes a feed roller 53, 54 (Figs. 3, 5) with a surface in continuous driving engagement with the material for feeding the material at a predetermined speed.

Claim 4 depends from Claim 3 and further specifies that the tear roller (56, 57 (Figs. 3, 5) is larger in diameter than the feed roller 53, 54 (Figs. 3, 5).

Claim 5 also depends from Claim 3 and further specifies that the tear roller (56, 57 (Figs. 3, 5) is larger in diameter than the feed roller 53, 54 (Figs. 3, 5).

Claim 6 defines the method as comprising the steps of feeding two superposed layers of film material having longitudinally spaced, transversely extending rows of perforations 27 (Fig. 1) along a path, injecting air between the two layers of film material, sealing the layers of film material together to form air-filled cushions between the rows of perforations, and partially tearing the material (tears 27 in Fig. 1) along the rows of perforations to facilitate tearing a desired number of the air-filled cushions from the string. The method is described at Page 6, line 11 to Page 7, line 14 of the specification.

Claims 7 and 8 depend from Claim 6. Claim 7 further specifies that the material is torn by continuously engaging an edge portion of the material with a feed roller 53, 53 (Figs. 3, 5) after the air-filled cushions are formed to feed the string of cushions at a predetermined speed and periodically exerting a abrupt pull on the material by engaging an edge portion of the material with a tear roller 56 (Figs. 3, 5) having an interrupted surface 66, 67 (Figs. 3, 5) with an arcuate section 67 (Figs. 3, 5) which engages the material to exert the pull only during a portion of a rotation of the roller.

Claim 8 depends from Claim 7 and further specifies that the arcuate section 67 (Figs 3, 5) travels faster than the predetermined speed .

Claim 9 defines the apparatus as comprising means (inflation tube 44 in Figs. 2 and 5) for injecting air between the layers to inflate the chambers, means (sealing assembly 46 in Fig. 2) for sealing the chambers to retain the air in them, means (feed rollers 53, 54 in Figs. 3 and 5) engagable with an edge portion of the film for feeding the film with the air-filled chambers along a path at a predetermined speed, and a tear roller 56 (Figs. 3, 5) having a surface 67 (Figs. 3, 5) that rotates faster than the predetermined speed and is intermittently engagable with the edge portion for exerting an abrupt periodic pull on the edge which produces a partial tearing 71 (Fig. 1) along the rows of perforations between the inflated chambers. See Page 3, line 7 to Page 6, line 10 and Page 7, lines 15 - 24.

Claims 10 - 14 depend from Claim 9, and Claim 10 further specifies that the surface of the tear roller 56 (Figs. 3, 5) has an arcuate section 67 (Figs. 3, 5) which periodically engages the edge portion of the material and a section 66 (Figs. 3, 5) adjacent to the arcuate section which remains out of driving engagement the material.

Claim 11 defines the means for feeding the film with the air-filled chambers at a predetermined speed as comprising a feed roller 53, 54 (Figs. 3, 5) with a surface in continuous driving engagement with the material.

Claim 12 depends from Claim 11 and further specifies that the tear roller 56, 57 (Figs. 3, 5) is larger in diameter than the feed roller 53, 54 (Figs. 3, 5) .

Claim 13 also depends from Claim 11 and further specifies that the tear roller 56, 57 (Figs. 3, 5) rotates faster than the feed roller 53, 54 (Figs. 3, 5) .

Claim 14 defines the method as comprising the steps of: injecting air between the layers to inflate the chambers to form the cushions, sealing the chambers to retain the air in the cushions, feeding the material along a path at a predetermined speed, and intermittently engaging an edge portion of the material with a tear roller 56 (Figs. 3, 5) having a surface 67 (Figs. 3, 5) that travels faster than the predetermined speed for exerting an abrupt periodic pull on the material which produces a partial tearing (tears 71, Fig. 1) along the rows of perforations 27 (Fig. 1) between the inflated chambers. See Page 6, line 11 to Page 7, line 14 of the specification.

Claim 15 defines the apparatus as comprising means (feed rollers 53, 54 in Figs. 3 and 5) engagable with an edge portion of the material for feeding the string of cushions at a predetermined speed, and a continuously rotating tear roller 56 (Figs. 3, 5) having a surface 67 (Figs. 3, 5) that rotates faster than the predetermined speed and periodically engages the edge portion and exerts an abrupt pull on the material which produces a partial tearing (tears 71, Fig. 1) along the rows of perforations 27 (Fig. 1) between the cushions. See Page 3, line 7 to Page 6, line 10 and Page 7, lines 15 - 24.

Claims 16 - 19 depend from Claim 15, and Claim 16 further specifies that the surface of the tear roller 56 (Figs. 3, 5) has an arcuate section 67 (Figs. 3, 5) which periodically engages the edge portion of the material and a section 66 (Figs. 3, 5) adjacent to the arcuate section which remains out of driving engagement the material.

Claim 17 defines the means for feeding the material at a predetermined speed as comprising a feed roller 53, 54 (Figs. 3, 5) with a surface in continuous driving engagement with the material.

Claim 18 depends from Claim 17 and further specifies that the tear roller 56 (Figs. 3, 5) is larger in diameter than the feed roller 53, 54 (Figs. 3, 5).

Claim 19 likewise depends from Claim 17 and further specifies that the tear roller 56 (Figs. 3, 5) rotates faster than the feed roller 53, 54 (Figs. 3, 5) .

Claim 20 defines the method as comprising the steps of engaging an edge portion of the material with a feed roller 53, 54 (Figs. 3, 5) to feed the string of cushions at a predetermined speed in a direction generally perpendicular to the rows of perforations 27 (Fig. 1), and intermittently engaging the edge portion of the material with a continuously rotating tear roller 56 (Figs. 3, 5) having a surface 67 (Figs. 3, 5) that travels faster than the predetermined speed and periodically engages the material to exert an abrupt pull on the material to produce a partial tearing (tears 71, Fig. 1) along the rows of perforations 27 (Fig. 1) between the cushions. See Page 3, line 7 to Page 6, line 10 and Page 7, lines 15 - 24.

GROUND OF REJECTION

The claims on appeal (Claims 1 - 20) have all been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 18 - 33 of copending Application No. 10/946,715.

Claims 1, 3, 5 - 7, 9, 11, 13 - 15, 17, 19 and 20 have been rejected 35 U.S. C. §103 as being unpatentable over Fuss et al. (U.S. 6,582,800) in view of Bolton (U.S. 4,493,684)

Claims 2, 4, 8, 10, 12, 16 and 18 have been rejected 35 U.S. C. §103 as being unpatentable over Fuss et al. in view of Bolton and further in view of Meschi (U.S. 5,230,453).

GROUPING OF CLAIMS

It is not acceptable to applicant to have the claims stand or fall together within the group in which they have been rejected. Different claims include different limitations, and the Board could very well find that at least some of the claims are directed to patentable subject matter even if it were to affirm the Examiner's rejection of others.

ARGUMENT

Double Patenting

The provisional double patenting rejection is believed to have been overcome by the filing of a terminal disclaimer, filed concurrently with this brief.

Obviousness

Claims 1, 3, 5 - 7, 9, 11, 13 - 15, 17, 19 and 20

Fuss et al. is cited as showing a method and apparatus for making a packing material in the form of a string of air-filled packing cushions with rows of perforations extending across the material between the cushions. However, as acknowledged by the Examiner, it fails to disclose or even remotely suggest partially tearing the material along the edge portion of the rows of perforations to facilitate tearing a desired number of the air-filled cushions from the string.

To overcome that shortcoming, the Examiner cites Bolton which is not concerned with air-filled packing cushions, but rather with a method for separating plastic bags. It utilizes one set of rollers 63A, 63B, etc. which must be moved into and out of contact with the bags whenever a partial tear is desired and a second set of rollers 64A, 64B which must be moved into and out of contact with the bags when a complete tear is desired. (See Figs. 3 and 4). Contrary to the Examiner's characterization, the rollers which produce the partial tear engage the central portion of the bags, not the edge portion, and the partial tear is made in the central portion between points A and B (See Figs. 2A and 2B).

There is no motivation in the references themselves or elsewhere in the prior art for combining the selected features of Fuss et al. and Bolton in the manner suggested by the Examiner. That motivation comes entirely from applicant's own disclosure and claims. In an apparent effort to find motivation, the Examiner suggests that the combination would make a packaging system which is capable of more rapid and economic operation, and although she does not say so, that language appears to have been taken from Bolton. However, it was used there (Col. 1, lines 35 - 41) in comparing a system in which a continuous chain of bags fed through a loading station with one in which individual bags are stacked on a conveyor in overlapping or shingled ("imbricated") fashion (see Col. 1, lines 18 - 34).

Moreover, the teachings of Fuss et al. and Bolton would not produce a workable system even if they could be combined in the manner suggested by the Examiner. In Bolton, the bags which are pretorn are uninflated and flat when the pretearing is done, and with the rollers engaging the central portions of the bags and having to be moved into and out of contact with the bags when tearing is desired, the mechanism shown in Bolton cannot be utilized to separate inflated cushions as in applicant's invention. If someone tried to use the mechanism shown in Bolton to pretear the cushions coming out of the Fuss et al. machine, either the inflated cushions would not pass between the rollers, or if the cushions could pass, they would be ruptured or "popped" when the rollers were pressed against them.

Claim 1 distinguishes over the references in calling for apparatus for making a packing material in the form of a string of air-filled packing cushions with rows of perforations extending across the material between the cushions, comprising: means for feeding superposed layers of film material having longitudinally spaced, transversely extending rows of perforations along a path, means for injecting air between the two layers of film material, means for sealing the layers of film material together to form air-filled cushions between the rows of perforations, and means engagable with the string of air-filled cushions for partially tearing the material along the rows of perforations to facilitate tearing a desired number of the air-filled cushions from the string. This combination of elements is neither found in nor even remotely suggested by the references.

Claims 3 and 5 depend from Claim 1 and are directed to patentable subject matter for the same reasons as their amended parent claim. In addition, Claim 3 defines the means for partially tearing the material as comprising a tear roller having an arcuate section which periodically engages an edge portion of the material and a section adjacent to the arcuate section which remains out of driving engagement the material and a feed roller with a surface in continuous driving engagement with the material for feeding the material at a predetermined speed. Claim 5 depends from Claim 3 and specifies that the tear roller rotates faster than the feed roller. Neither Fuss et al. nor Bolton even

remotely suggests a pretearing system having a tear roller with an arcuate section which periodically engages an edge portion of the material and a section adjacent to the arcuate section which remains out of driving engagement the material.

Claim 6 is directed to a method of making a packing material in the form of a string of air-filled packing cushions with rows of perforations extending across the material between the cushions, and distinguishes over the references in calling for the steps of feeding two superposed layers of film material having longitudinally spaced, transversely extending rows of perforations along a path, injecting air between the two layers of film material, sealing the layers of film material together to form air-filled cushions between the rows of perforations, and partially tearing the material along the rows of perforations to facilitate tearing a desired number of the air-filled cushions from the string. That combination is neither found in nor suggested by the references.

Claim 7 depends from Claim 6 and is directed to patentable subject matter for the same reasons as its parent claim. In addition, Claim 7 further specifies that the material is torn by continuously engaging an edge portion of the material with a feed roller after the air-filled cushions are formed to feed the string of cushions at a predetermined speed and periodically exerting a abrupt pull on the material by engaging an edge portion of the material with a tear roller having an interrupted surface with an arcuate section which engages the material to exert the pull only during a portion of a rotation of the roller. Neither Fuss et al. nor Bolton discloses or suggests periodically exerting a abrupt pull on the material by engaging an edge portion of the material with a tear roller having an interrupted surface with an arcuate section which engages the material to exert the pull only during a portion of a rotation of the roller.

Claim 9 distinguishes over the references in calling for means for injecting air between the layers to inflate the chambers, means for sealing the chambers to retain the air in them, means engagable with an edge portion of the film for feeding the film with the air-filled chambers along a path at a predetermined speed, and a tear roller having a surface that rotates faster than the predetermined speed and is intermittently engagable with the edge portion for exerting an abrupt periodic pull on the edge which produces a partial tearing along the rows of perforations between the inflated chambers. As discussed above, the references do not show or suggest a tear roller that is intermittently engagable in the specified manner with the edge portion of a string of inflated string of air-filled packing cushions.

Claims 11 and 13 depend from Claim 9 and is directed to patentable subject matter for the same reasons as their parent claim. In addition, Claim 10 further specifies that the means for feeding the film with the air-filled chambers at a predetermined speed comprises a feed roller with a surface in continuous driving engagement with the material.

Claim 13 further distinguishes in specifying that the tear roller is larger in diameter than the feed roller.

Claim 14 is directed to a method of making a string of air-filled packing cushions from an elongated strip of preconfigured film having a plurality of uninflated chambers formed between two layers of the film with rows of perforations extending across the film between successive ones of the chambers, and distinguishes over the references in calling for the steps of injecting air between the layers to inflate the chambers to form the cushions, sealing the chambers to retain the air in the cushions, feeding the material along a path at a predetermined speed, and intermittently engaging an edge portion of the material with a tear roller having a surface that travels faster than the predetermined speed for exerting an abrupt periodic pull on the material which produces a partial tearing along the rows of perforations between the inflated chambers.

Claim 15 is directed to apparatus for pre-tearing a string of air-filled packing cushions having a plurality of longitudinally spaced air-filled chambers with rows of perforations extending across the material between successive ones of the chambers, and distinguishes over the references in calling for means engagable with an edge portion of the material for feeding the string of cushions at a predetermined speed, and a continuously rotating tear roller having a surface that rotates faster than the predetermined speed and periodically engages the edge portion and exerts an abrupt pull on the material which produces a partial tearing along the rows of perforations between the cushions.

Claims 17 and 19 depend from Claim 15 and are directed to patentable subject matter for the same reasons as their parent claim. In addition, Claim 17 further specifies that the means for feeding the material at a predetermined speed comprises a feed roller with a surface in continuous driving engagement with the material, and Claim 19 specifies that the tear roller rotates faster than the feed roller.

Claim 20 is directed to a method of pre-tearing a string of air-filled packing cushions having a plurality of longitudinally spaced air-filled chambers with rows of perforations extending across the material between successive ones of the chambers, and distinguishes over the references in calling for the steps of: engaging an edge portion of the material with a feed roller to feed the string of cushions at a predetermined speed in a direction generally perpendicular to the rows of perforations, and intermittently engaging the edge portion of the material with a continuously rotating tear roller having a surface that travels faster than the predetermined speed and periodically engages the material to exerts an abrupt pull on the material to produce a partial tearing along the rows of perforations between the cushions.

Claims 2, 4, 8, 10, 12, 16, 18

In the rejection of these claims, Fuss et al. and Bolton are applied as above, and Meschi is cited as showing tear rollers 125, 126 having arcuate sections and flat sections which remain out of driving engagement with a material. Meschi, however, is not concerned with air-filled packing cushions, but rather with apparatus for high speed cutting and stacking of paper sheets or forms from a continuous web. The elements (125, 126) characterized by the Examiner as tear rollers do not rotate continuously, but turn only when it is desired to sever the material, and when they do turn, the material is completely severed rather than being only partially torn as in applicant's invention. When the material is traveling through the apparatus, the rollers are turned to a fixed position in which the material can pass freely between them.

As noted above, while Fuss et al. may be concerned with the manufacture of air-filled packing cushions, it does not teach or even remotely suggest the pre-tearing of strings of such cushions to facilitate their subsequent separation in use. In fact, none of the references recognizes or suggests the desirability of doing so, and the only motivation for the pre-tearing of strings of air-filled packing cushions is in applicant's own disclosure and claims.

Claim 2 and 4 depend from Claim 1 and are directed to patentable subject matter for the same reasons as their parent claim. In addition, Claim 2 defines the means for partially tearing the material as comprising a tear roller having an arcuate section which periodically engages an edge portion of the material and a section adjacent to the arcuate section which remains out of driving engagement the material, and Claim 4 further specifies that the tear roller is larger in diameter than the feed roller.

Claim 8 depends from Claim 6 and is directed to patentable subject matter for the same reasons as its parent claim. In addition, Claim 8 specifies that the arcuate section of the tear roller that engages the edge portion of the material travels faster than the predetermined speed at which the material is fed.

Claims 10 and 12 depend from Claim 9 and are directed to patentable subject matter for the same reasons as their parent claim. In addition, Claim 10 further specifies that the surface of the tear roller has an arcuate section which periodically engages the edge portion of the material and a section adjacent to the arcuate section which remains out of driving engagement the material, and Claim 13 specifies that the tear roller rotates faster than the feed roller.

Claims 16 and 18 depend from Claim 15 and are directed to patentable subject matter for the same reasons as their amended parent claim. In addition, Claim 16 further specifies that the surface of the tear roller has an arcuate section which periodically engages the edge portion of the material and a section adjacent to the arcuate section which remains out of driving engagement the material, and Claim 19 further specifies

that the tear roller rotates faster than the feed roller that feeds the material at a predetermined speed.

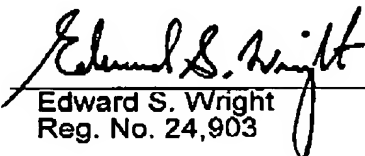
SUMMARY AND CONCLUSION

It is respectfully submitted that the rejections which the Examiner has made cannot be sustained and that the action of the Examiner should be reversed.

Deposit Account Authorization

The Commissioner is authorized to charge any fees required in this matter, including extension fees to Deposit Account 50-2975, Order No. A-75001.

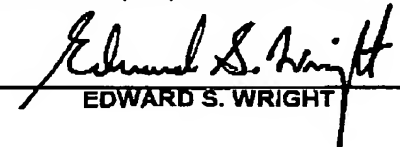
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CERTIFICATE OF FACSIMILE TRANSMISSION

I CERTIFY THAT THIS BRIEF ON APPEAL IS BEING FORWARDED TO THE PATENT OFFICE FOR FILING VIA FACSIMILE TRANSMISSION TO (571) 273-8300 ON June 30, 2006.


EDWARD S. WRIGHT

The Claims on Appeal

1. Apparatus for making a packing material in the form of a string of air-filled packing cushions with rows of perforations extending across the material between the cushions, comprising: means for feeding superposed layers of film material having longitudinally spaced, transversely extending rows of perforations along a path, means for injecting air between the two layers of film material, means for sealing the layers of film material together to form air-filled cushions between the rows of perforations, and means engagable with the string of air-filled cushions for partially tearing the material along the rows of perforations to facilitate tearing a desired number of the air-filled cushions from the string.

2. The apparatus of Claim 1 wherein the means for partially tearing the material comprises a tear roller having an arcuate section which periodically engages an edge portion of the material and a section adjacent to the arcuate section which remains out of driving engagement the material.

3. The apparatus of Claim 2 wherein the means for partially tearing the material also includes a feed roller with a surface in continuous driving engagement with the material for feeding the material at a predetermined speed.

4. The apparatus of Claim 3 wherein the tear roller is larger in diameter than the feed roller.

5. The apparatus of Claim 3 wherein the tear roller rotates faster than the feed roller.

6. A method of making a packing material in the form of a string of air-filled packing cushions with rows of perforations extending across the material between the cushions, comprising the steps of: feeding two superposed layers of film material having longitudinally spaced, transversely extending rows of perforations along a path, injecting air between the two layers of film material, sealing the layers of film material together to form air-filled cushions between the rows of perforations, and partially tearing the material along the rows of perforations to facilitate tearing a desired number of the air-filled cushions from the string.

7. The method of Claim 6 wherein the material is torn by continuously engaging an edge portion of the material with a feed roller after the air-filled cushions are formed to feed the string of cushions at a predetermined speed and periodically exerting a abrupt pull on the material by engaging an edge portion of the material with a tear roller having an interrupted surface with an arcuate section which engages the material to exert the pull only during a portion of a rotation of the roller.

8. The method of Claim 7 wherein the arcuate section travels faster than the predetermined speed .

9. Apparatus for making a string of air-filled packing cushions from an elongated strip of preconfigured film having a plurality of uninflated chambers formed between two layers of the film with rows of perforations extending across the film between successive ones of the chambers, comprising: means for injecting air between the layers to inflate the chambers, means for sealing the chambers to retain the air in them, means engagable with an edge portion of the film for feeding the film with the air-filled chambers along a path at a predetermined speed, and a tear roller having a surface that rotates faster than the predetermined speed and is intermittently engagable with the edge portion for exerting an abrupt periodic pull on the edge which produces a partial tearing along the rows of perforations between the inflated chambers.

10. The apparatus of Claim 9 wherein the surface of the tear roller has an arcuate section which periodically engages the edge portion of the material and a section adjacent to the arcuate section which remains out of driving engagement the material.

11. The apparatus of Claim 9 wherein the means for feeding the film with the air-filled chambers at a predetermined speed comprises a feed roller with a surface in continuous driving engagement with the material.

12. The apparatus of Claim 11 wherein the tear roller is larger in diameter than the feed roller.

13. The apparatus of Claim 11 wherein the tear roller rotates faster than the feed roller.

14. A method of making a string of air-filled packing cushions from an elongated strip of preconfigured film having a plurality of uninflated chambers formed between two layers of the film with rows of perforations extending across the film between successive ones of the chambers, comprising the steps of: injecting air between the layers to inflate the chambers to form the cushions, sealing the chambers to retain the air in the cushions, feeding the material along a path at a predetermined speed, and intermittently engaging an edge portion of the material with a tear roller having a surface that travels faster than the predetermined speed for exerting an abrupt periodic pull on the material which produces a partial tearing along the rows of perforations between the inflated chambers.

15. Apparatus for pre-tearing a string of air-filled packing cushions having a plurality of longitudinally spaced air-filled chambers with rows of perforations extending across the material between successive ones of the chambers, comprising: means engagable with an edge portion of the material for feeding the string of cushions at a predetermined speed, and a continuously rotating tear roller having a surface that rotates faster than the predetermined speed and periodically engages the edge portion and exerts an abrupt pull on the material which produces a partial tearing along the rows of perforations between the cushions.

16. The apparatus of Claim 15 wherein the surface of the tear roller has an arcuate section which periodically engages the edge portion of the material and a section adjacent to the arcuate section which remains out of driving engagement the material.

17. The apparatus of Claim 15 wherein the means for feeding the material at a predetermined speed comprises a feed roller with a surface in continuous driving engagement with the material.

18. The apparatus of Claim 17 wherein the tear roller is larger in diameter than the feed roller.

19. The apparatus of Claim 17 wherein the tear roller rotates faster than the feed roller.

20. A method of pre-tearing a string of air-filled packing cushions having a plurality of longitudinally spaced air-filled chambers with rows of perforations extending across the material between successive ones of the chambers, comprising the steps of: engaging an edge portion of the material with a feed roller to feed the string of cushions at a predetermined speed in a direction generally perpendicular to the rows of perforations, and intermittently engaging the edge portion of the material with a continuously rotating tear roller having a surface that travels faster than the predetermined speed and periodically engages the material to exert an abrupt pull on the material to produce a partial tearing along the rows of perforations between the cushions.